# **[Scalable Deep Kernel Gaussian Process for Vehicle Dynamics in Autonomous Racing]**

This folder contains the code accompanying the paper .

## **Getting Started**

These instructions will guide you through the process of setting up the environment and running the software.

### **Prerequisites**

List the software, libraries, and their versions used. For example:

1. Python 3.8+

2. PyTorch 2.0.0

3. gpytorch 1.10

4. matplotlib 3.7.1

5. scipy 1.10.1

6. numpy 1.24.2

**## Running the Software**

To run the code conducting the experiments in the paper, we have created two python notebook, and one matlab script.

The datasets for experiments are also included in the folder

**Python notebook**: code of SKIP-GP & DKL-SKIP

**Matlab**: code of N4SID

All of the code above should be running straightforward and well-commented.

\*Noted: To successfully run the matlab script, you have to install the sysID toolbox beforehand.